

Disentangling practices, carriers and production-consumption systems

Citation for published version (APA):

Backhaus, J., Wieser, H., & Kemp, R. (2015). Disentangling practices, carriers and production-consumption systems: a mixed-method study of (sustainable) food consumption. In E. Huddart Kennedy, M. J. Cohen, & N. T. Krogman (Eds.), *Putting Sustainability into Practice: Applications and advances in research on sustainable consumption* (pp. 109-133). [6] Edward Elgar Publishing.

Document status and date:

Published: 01/01/2015

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

6. Disentangling practices, carriers, and production–consumption systems: a mixed-method study of (sustainable) food consumption

Julia Backhaus, Harald Wieser, and René Kemp

INTRODUCTION

More than three decades ago, cultural anthropologist Mary Douglas coined the expression ‘food is not feed’ (1982, p. 124). Douglas analyzed links among food, public policy, and social change and studied food as a system of communication and as an art form, asserting that food ‘always has a social dimension of the utmost importance’ (p. 82). She hoped to establish recognition of ‘how food enters the moral and social intentions of individuals’ and how it is used to ‘create and maintain . . . social relations’ (Douglas 1984, p. 10). Undoubtedly, food and practices related to its provision, obtainment, preparation, and consumption carry many dimensions, including economic, political, social, and cultural significance. At the same time, food is tied to family traditions and individual taste, nutritional needs, and preferences.

We focus in this chapter on food consumption and scrutinize how far practice-based approaches aid in developing a better understanding of human behavior, both conceptually and analytically. Reminiscent of Reckwitz’s (2002) frequently cited definition of a practice as ‘a routinised type of behaviour which consists of several elements, interconnected to one other’ (p. 249), we attempt to unpack these elements, yet refrain from focusing solely on the constituents of practices. We contemplate whether additional elements that are conceptually better assigned to practice-carriers or to the production–consumption systems in which practices are embedded can help to explain practice variations that otherwise remain insufficiently understood. The elements of practices, understood to be materials, meanings, and competences (Shove et al. 2012), might engulf individual values or exclude systemic factors that give rise to particular divergences in practice performances. Therefore, we examine, on the one

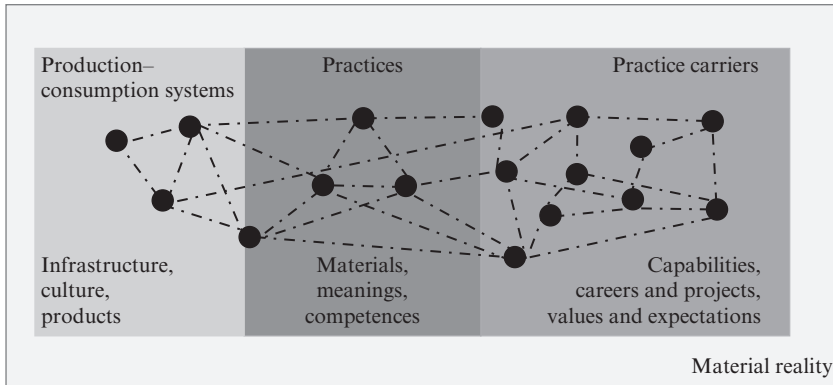


Figure 6.1 A web of entangled elements across practices, their carriers, and production-consumption systems

hand, the role of diversified production-consumption systems that accommodate or even facilitate a wide array of possible practice performances and, on the other hand, elements on the part of individual carriers that interactively give rise to a very diverse, yet patterned, range of observable practices in everyday life. We thus propose a conceptual framework that can cope with practice variations. To this end, we develop the notion of 'webs of entangled elements' across production-consumption systems, practices, and their carriers (Figure 6.1).

Using detailed empirical data derived from several in-depth interviews and a survey of over 1200 respondents (as carriers of practices) in three European countries (Austria, Hungary and the Netherlands as examples of differing production-consumption systems), we trace the role of a number of elements in bringing about variation or supporting stability in practice performances. Though the list of the elements we examine is not exhaustive, it is comprehensive and inspired by prior research (Gram-Hanssen 2011; Reckwitz 2002; Schatzki 1996; Shove et al. 2012; Warde 2005).

We first elaborate our conceptual approach and framework and then describe our methods. These specifications are followed by description of the data and presentation and analysis of our results. We conclude with some reflections on our findings.

CONCEPTUAL APPROACH AND FRAMEWORK

While practice-based approaches for understanding people's everyday behaviors have a long history (Nicolini 2013), they have experienced an

interesting and academically demanding revival in recent years, especially with respect to theory development and application (see Chapter 1 of this volume). Faced with the challenges of our times, such as climate change, resource scarcity, and social inequality, practice researchers in the consumption domain (cf. Shove 2010; Warde 2005) promise more appropriate theorizing that seeks to overcome overly individualistic or structural approaches and to develop a better understanding of how to more sustainably organize everyday life. In line with these intentions, this chapter explores the instrumental and operational use of practice theories in studying and conceptualizing diversity of and change in food-consumption practices.

Interesting work has been carried out to date on the emergence of new practices (Shove and Pantzar 2005), the persistence and stability of practices over space and time (Bourdieu 1990), the operationalization of continuity and change in the performance of practices (Gram-Hanssen 2011; Warde 2005), and the nature of individuality (Schatzki 1996). Nevertheless, practice-inspired empirical work faces difficulty capturing the diversity of and change in practices while studying particular (forms of) practices and (configurations of) their constituent elements. In more recent empirical work, Halkier and Jensen (2011) describe instabilities in consumption processes, yet admit that their typology of practices fails to capture these characteristics. They propose to empirically study practice variability through practice performances and performativity. We follow a similar route but focus our efforts on developing a conceptual framework that captures reasons for change and stability in practices.

In this chapter we investigate how entangled and mutually constitutive elements across production–consumption systems, practices, and their carriers give rise to diversified patterns of practices (and hence consumption). The focus is on the integrative practice (Schatzki 1996) of food purchasing, which not only involves a number of dispersed practices such as planning, questioning, examining, and imagining, but is also intricately linked with several other integrative practices including working, moving or traveling, cooking, and eating. To establish our argument we narrow our gaze to a number of specific aspects of the practice of food purchasing, namely the purchasing of processed food, (organic) meat, and (regional, seasonal, and organic) produce. In addition to theoretical or conceptual reasons for choosing this focus, we also strive to contribute to sustainability research on reductions in the consumption of meat and processed food, as well as the use of organic meat and regional, seasonal, and organic fruit and vegetables.

Our conceptual approach draws on the work of Anthony Giddens (1979; 1984) and his notion of the duality of structure. In addition, and

in common with other practice theorists, we assert that practices can be understood as nexuses of doings and sayings (Schatzki 1996). Reckwitz (2002) enumerates the following interconnected elements as constituting a practice: 'forms of bodily activities, forms of mental activities, things and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge' (p. 250). Consistent with this list of factors, we agree that routinized and conventionalized ways of understanding 'are necessary elements and qualities of a practice in which the single individual participates, not qualities of the individual' (Reckwitz 2002, p. 250). Further, we follow others who emphasize the role of 'the physical', be it in the form of bodies and the tacit knowledge they encapsulate (Polanyi [1958] 1998) or in the form of material objects that are part and parcel of (ensembles of) practices (Shove et al. 2012). The objects, materials, and infrastructures that are necessary for the performance of practices, and thereby also shape practices-as-entities, have been usefully conceptualized as forming part of production-consumption systems.

We would, however, like to refrain from a conceptual understanding of the production-consumption system as an external backdrop against which practices are staged (Spaargaren 2003) or as forming a dynamic setting malleable to and somehow part of practices (Shove et al. 2012). Rather we view production-consumption systems as being constituted by practices, yet considered from the perspective of a single practice or a single carrier as relatively static. Further, despite the appearance of stasis, production-consumption systems are diversified, enabling and constraining a range of performances. Practice-carriers navigate these possibilities at their discretion, yet they are bound by experiences, expectations, and expenditures, among other things. This conceptual approach allows us to test the extent to which the empirically observable patterned variation of practices can be explained by systemic or individual factors without falling into the abyss of determinism. Additionally, the framework helps us understand why certain practice performances are more popular than others.

With these conceptual starting points established, we can advance the following framework, which consists of webs of entangled elements that form part of a practice, its carriers, and production-consumption systems. All elements are embedded in physical reality encompassing resources, objects, infrastructures, and bodies.

As others have demonstrated (Geertz [1973] 2003; Royal Commission on Environmental Pollution 2006), the concept of a web is useful in signifying interrelations and the mutual constitutiveness of its components. Although there is room for flexibility, creativity, and improvisation – or agency – in the performance of every practice, practices come with a set of material objects, necessary knowledge, know-how, competences, understandings,

and meanings (Shove et al. 2012). These constituents present themselves to (potential) practice-carriers as elements that need to be mastered to perform a practice (Gherardi and Nicolini 2002). For our research on sustainable food consumption, we conceptualize practices as constituted of and entangled with elements that support, or even facilitate, some variation while simultaneously forming a net or web providing rules, offering guidance, and restricting certain actions or possibilities. We thus closely follow Giddens' (1979; 1984) theory of structuration and understand the mutually dependent and entangled elements as 'webs of drivers and constraints' for a diverse, yet patterned range of practices. Attributing some elements to the central practice considered, other elements to individual carriers, and yet still others to production–consumption systems allows us to profit from the strengths of practice-based approaches. At the same time it enables us to apply these strengths to a detailed analysis of various factors at play that are not necessarily part of the practice considered but are nonetheless influential to its performance.

Empirical work is needed to determine these influential factors. Since the primary purposes of this exploratory study are the development and testing of our conceptual framework, we pre-identified a number of key factors that give rise to patterns of food-purchasing practices (see Table 6.1). With respect to practices, we follow Shove et al. (2012) in considering materials, meanings, and competences. Other elements included are inspired by consumption research or emergent from our data. Concerning the production–consumption system, three elements are notable: infrastructure, culture, and products and services. These constituents encompass the physical environment relevant for the practice of interest (e.g., supermarket, parking space), the products and services available in this environment, and the dominant customs and traditions in society.

Consistent with Reckwitz (2002), we view carriers as 'the unique crossing points of practices' (p. 256). The success of a practice to 'recruit' (Shove and Pantzar 2005) a carrier depends on the individuals' capabilities, career, ongoing projects, and the values and expectations of how a practice is to be performed. An individual's capabilities can be broadly understood as the capacity to adopt a practice and are strongly linked to acquired social, cultural, and economic capital (Bourdieu 1986), as well as to physical and mental abilities. The concept of the career refers to past practices an individual has carried out and the notion of dominant projects denotes the various practices in which an individual is engaged at a specific point in time (Shove et al. 2012). Values and expectations do not delimit the general possibilities of individuals, but in accordance with Schatzki (1996) they 'are threatening transgressors with sanctions' (p. 162) and thereby render particular practice performances more likely than others. Our framework

Table 6.1 Elements of production–consumption systems, practices, and carriers

Production–consumption Systems	Practices	Carriers
Infrastructure	Materials	Capabilities
Culture	Meanings	Career (past practices) and dominant projects (current practices)
Products and services	Competences	Values and expectations

thus invites the empirical investigation of nine (groups of) elements or factors that relate to the (sustainable food-purchasing) practices under scrutiny, their carriers or the production-consumption system they are embedded in (see Table 6.1).

METHODS AND DATA

To explore relevant elements of practices, their carriers, and production–consumption systems that shape sustainable food-purchasing practices, we collected qualitative and quantitative data through semi-structured interviews and a questionnaire survey. Although social practices are our primary unit of analysis we also include features of practice-carriers and production–consumption systems as secondary units of analysis that shape everyday practices.

Some students of practices who doubt people’s ability to reflect meaningfully about practices view both methods of data collection we used critically. This concern is based on the quality of practices as involving tacit knowledge, which eludes consciousness and leads to a tendency for individuals to rationalize their behaviors when asked to reflect on them (Miroso et al. 2011). Hence, practice theorists often prefer ethnographic methods to ‘less direct’ forms of data collection. However, participant-observation data also do not simply present the observed but comprise the observers’ interpretations and representations (Atkinson and Coffey 2003). Like Halkier and Jensen (2011), we contend that qualitative data can capture social performances or enactments, allowing for the study of ‘doings’ and ‘sayings’ and therefore offering insight into the ‘organizing elements’ of practices (p. 111).

Similar to Hitchings (2012) we found that respondents do not report naively but that they critically reflect on utterances, often without having (yet) been asked to do so. Based on these experiences, we assert that

interviews can be used to tap into discourses about sustainable food-purchasing practices. Conversations and stories are key components of the dissemination and entrenchment of practices (Hitchings 2012; Nicolini 2013; Schatzki 1996).

If interviews are viewed as a 'less direct' method of data collection than participant observation, a quantitative survey can provide an additional mediating instrument. In our view gathering data on the reported behaviors of respondents and their socio-demographic backgrounds, values, and interests offers at least three advantages: 1) a broad-scoped and varied picture of practices and their carriers can be obtained; 2) cross-national and cross-socioeconomic group comparisons are possible; and 3) the popularity and coverage of certain practices, also in relation to one another, can be determined. As Kennedy et al. (2013) have convincingly argued in their study of transportation practices, regression analyses help to show how circumstantial factors have a bearing on consumption practices.

Following the above considerations and our own experiences, we deem both methods – qualitative interviewing and quantitative data collection – capable of uncovering insights about practices if they are applied in a reflective way and if they are triangulated and analyzed with caution. On one hand, the survey data enable us to learn about 'typical performers' as well as the spread of particular food-purchasing practices among certain social groups. Qualitative in-depth interviews, on the other hand, offer information on respondents' reflections on their life circumstances and other relevant elements shaping the food-purchasing practices that we consider here, such as meanings, competences, information, and infrastructure. For instance, due to the predictive power of age in our quantitative model we took care to interview representatives from all age groups in each country. In Hungary, where the survey sample was skewed toward the younger age groups, we took care to recruit two interviewees above the age of 60. Although the number of interviews ($n = 15$) is dwarfed by the number of survey respondents ($n = 1217$), each dataset offers valuable insights to this explorative study.

Our large-scale, web-based questionnaire survey forms the quantitative basis of this chapter and was completed by Austrian, Hungarian, and Dutch citizens ($n = 1217$) with a minimum age of 18 between December 2013 and January 2014.¹ In addition to a wide range of questions about people's behavior in the food, mobility, and housing domains the survey contained a section on respondents' socio-demographic backgrounds as well as a number of statements probing their attitudes and values.² The survey section on food consumption asked respondents to report their dietary habits, the percentage of all food purchases that comprise regional, seasonal, and processed food, and how much organic meat and fish they consume.

The Dutch and Austrian samples are representative in terms of age and education and the Austrian sample is also representative with respect to gender. Notable recruitment difficulties arose in Hungary, where Internet use is most prominent among younger generations and people with higher levels of education. These circumstances resulted in overrepresentation of respondents who hold a university degree or higher. The Hungarian sample is representative only in terms of gender.³

To better understand the connections between agency, practices, and structures, we conducted ordinal and multinomial logistic regressions. The regression analyses were performed in SPSS version 21. Regressions were used to determine which factors exert a statistically significant influence on the share of food that is seasonal, regional, processed, or organic and the frequency of meat or fish consumption. Logistic regression analysis is an appropriate method when the dependent variable has an ordinal scale because it assumes a specific link function between the dependent and independent variables. All regressions were tested for their model fit, outliers, multicollinearity, dispersion, and the parallelity of lines or proportional odds, respectively. In the case of meat or fish consumption the parallelity of lines was rejected wherefore a multinomial logistic regression is used. Socio-demographic variables, the planning of meals ahead, and a measure for environmental concerns were included in all regressions. Responses to the following questions and statements were taken to define the measure for environmental concerns: 'I feel a (spiritual) connection with nature', 'I like spending time in nature', 'Mankind is over-exploiting natural resources', 'Natural resources need to be preserved for mankind's future generations', 'Natural resources need to be preserved because they are irreplaceable', 'Do you think that future generations will be economically less well-off than present generations as a result of resource depletion?', and 'Do you think that future generations will experience a reduction in general well-being due to resource depletion?' A categorical principal component analysis suggests that environmental concerns are reliably measured (Cronbach's alpha = 0.75).

In addition to the survey, we conducted 15 semi-structured interviews in April and May 2014, with five respondents from each of the three countries, either via telephone or face to face, and lasting on average for 47 minutes. For the analysis, all interviews were transcribed and coded. During the interviews, we invited respondents to describe their food-purchasing practices and subsequently probed into issues that were of specific interest to us, such as the regionality and seasonality of purchased produce. Further, we asked questions about people's emotions, associations, and competences with respect to their food-purchasing practices and the meanings that they attach to particular food characteristics, including

organic, regional, or seasonal. Finally, we asked respondents for reflections on how their practices shifted over time and which people, experiences, or systemic aspects played a role in these changes. This technique helped us to avoid the problem of overly purpose-driven explanations typical of social psychological research. Interviewees were selected to capture diversity in terms of gender, age, education, living situation, and lifestyle. Particular attention was also paid to their level of environmental awareness or concern.

RESULTS AND ANALYSIS

To operationalize our focus on sustainable food-purchasing practices, we consider here exclusively the purchasing of regional and seasonal produce and (organic) meat or fish. Results of our statistical analyses, presented in Tables 6.2 and 6.3, depict the output of four ordinal and logistic regressions, where the share of regional food, seasonal food, processed food, and organic meat or fish are regressed on a number of socio-demographic variables as well as a measure of respondents' environmental values and concerns. Additionally, we include in the analysis a measure of the extent to which meals are planned ahead.

Our conceptual framework encourages us to structure the presentation and analysis of the research results around the three realms of (sustainable) food-purchasing practices, their carriers, and food production–consumption systems. As we will see, relevant elements interrelate across these analytically distinguished spheres and it is precisely these dynamics that we are seeking to disentangle. Table 6.4 provides a snapshot of the frequency of various practice performances, the details of which are examined in the ensuing parts of this chapter.

Sustainable Food-purchasing Practices: Materials, Meanings, and Competences

The first elements we disentangle relate to how people use competence to make sense of, give meaning to, and navigate material reality. First, infrastructure exists that facilitates delivery of products and services. These are the same for everyone at a given time and in a particular place and can be viewed as systemic elements. At the same time, these material elements tie practices together and have been considered part of practices (Shove et al. 2012).⁴ In other words, particular practice performances are tied to certain places. For instance, regional and organic food is preferably bought at local markets that, in turn, are associated with better and healthier products.

Table 6.2 Buying regional, seasonal, processed food and organic meat or fish

Link function	Regional food			Seasonal food			Processed food			Organic meat/fish		
	logit			logit			logit			logit		
	B	OR	(SE)	B	OR	(SE)	B	OR	(SE)	B	OR	(SE)
<i>Threshold</i>	1 = <10%			1 = <10%			1 = <10%			1 = >75%		
	2 = 10–30%			2 = 10–30%			2 = 10–30%			2 = 50–75%		
	3 = 30–50%			3 = 30–50%			3 = 30–50%			3 = 25–50%		
	4 = 50–80%			4 = 50–80%			4 = >50%			4 = 10–25%		
	5 = >80%			5 = >80%			5 = >50%			5 = <10%		
<i>Threshold</i>	1			2			3			4		
	5			6			7			8		
	9			10			11			12		
	13			14			15			16		
<i>Country</i>	Austria			Hungary			Netherlands					
	1			2			3			4		
	5			6			7			8		
	9			10			11			12		
<i>Threshold</i>	1			2			3			4		
	5			6			7			8		
	9			10			11			12		
	13			14			15			16		
<i>Country</i>	Austria			Hungary			Netherlands					
	1			2			3			4		
	5			6			7			8		
	9			10			11			12		

Table 6.2 (continued)

Link function	Regional food		Seasonal food		Processed food		Organic meat/fish	
	logit		logit		logit		logit	
	B	OR	B	OR	B	OR	B	OR
	(SE)		(SE)		(SE)		(SE)	
	1 = <10%		1 = <10%		1 = <10%		1 = >75%	
	2 = 10–30%		2 = 10–30%		2 = 10–30%		2 = 50–75%	
	3 = 30–50%		3 = 30–50%		3 = 30–50%		3 = 25–50%	
	4 = 50–80%		4 = 50–80%		4 = >50%		4 = 10–25%	
	5 = >80%		5 = >80%				5 = <10%	
<i>Income</i>								
<10,000€/year	–0.106 (0.162)	0.90	–0.772** (0.227)	0.46	0.135 (0.185)	1.14	0.490 (0.257)	1.63
10–20,000€/year	0.139 (0.131)	1.15	–0.265 (0.179)	0.77	0.228 (0.147)	1.26	0.553** (0.195)	1.74
20–30,000€/year	0.116 (0.122)	1.12	0.140 (0.167)	0.87	0.052 (0.138)	1.05	0.307 (0.178)	1.36
>30,000€/year	–	–	–	–	–	–	–	–
<i>Environmental score</i>								
	0.010 (0.043)	1.01	–0.180** (0.060)	0.84	0.114* (0.047)	1.12	0.375** (0.176)	1.46
<i>–2 log likelihood</i>								
Intercept only	2166.264		2735.066		2027.529		2493.087	
Final	2086.431		2652.653		1903.371		2315.452	
<i>R² Cox and Snell</i>	0.107		0.085		0.126		0.182	

Note: The reference category is ‘one day per week or less’; B = coefficients, SE = standard errors, OR = odds ratio; significant coefficients/odds ratios are shown in bold; a * (**) indicates that the coefficient is different from zero at a 5% (1%) level of significance.

Table 6.3 Eating meat or fish: multinomial regression

	Every day		4–5 days per week		2–3 days per week	
	B(SE)	OR	B(SE)	OR	B(SE)	OR
Constant	3.007** (0.752)	20.23	2.712** (0.725)	15.06	1.578* (0.747)	4.84
Country						
Austria	-2.404** (0.480)	0.09	-0.914* (0.459)	0.40	-0.031 (0.474)	0.97
Hungary	-1.026* (0.499)	0.36	-0.336 (0.485)	0.71	0.018 (0.506)	1.02
Netherlands	—	—	—	—	—	—
Gender						
Men	1.453** (0.331)	4.28	1.166** (0.319)	3.21	0.930** (0.325)	2.53
Women	—	—	—	—	—	—
Age						
18–25	0.368 (0.599)	1.44	0.368 (0.562)	1.45	0.039 (0.588)	1.04
26–35	0.388 (0.505)	1.47	-0.129 (0.485)	0.88	0.108 (0.496)	1.11
36–45	1.221* (0.617)	3.39	1.006 (0.597)	2.73	1.239* (0.605)	3.45
46–55	0.104 (0.538)	1.11	-0.206 (0.518)	0.81	0.555 (0.520)	1.74
56–65	-0.666 (0.475)	0.51	-0.758 (0.452)	0.47	-0.495 (0.467)	0.61
> 65	—	—	—	—	—	—
Education						
Secondary school	0.653 (0.599)	1.92	0.439 (0.585)	1.55	0.422 (0.592)	1.52
A levels or similar	-1.034* (0.431)	0.36	-0.882* (0.410)	0.41	-0.846* (0.417)	0.43
Vocational training	-0.243 (0.477)	0.78	-0.191 (0.459)	0.83	-0.234 (0.466)	0.79
University degree(s)	—	—	—	—	—	—
Income						
<10,000€/year	-1.121* (0.539)	0.33	-1.187* (0.513)	0.31	-0.534 (0.518)	0.59
10–20,000€/year	-0.723 (0.451)	0.49	-0.662 (0.430)	0.52	-0.447 (0.439)	0.64
20–30,000€/year	0.500 (0.517)	1.65	0.256 (0.506)	1.29	0.789 (0.511)	2.20
>30,000€/year	—	—	—	—	—	—
Environmental score	0.247 (0.148)	1.28	0.196 (0.141)	1.22	-0.009 (0.143)	0.99

Note: The reference category is 'one day per week or less'; B = coefficients, SE = standard errors, OR = odds ratio; significant coefficients/odds ratios are shown in bold; * (**) indicates that the coefficient is different from zero at a 5% (1%) level of significance. Model fit: -2 log likelihood intercept only: 2472.902, final: 2219.039; R² (Cox and Snell) = 0.229.

Table 6.4 Overview of food-purchasing practice performances

Survey findings
<ul style="list-style-type: none">• People report buying seasonal food more often than regional food• Almost 45 percent of respondents report that more than 50 percent of produce they buy is seasonal• More than a quarter of respondents indicate that at least 50 percent of produce bought is regional• More than half indicate that at least 10 percent of produce they buy is processed• Less than a third of respondents report eating meat every day• More than 35 percent state they eat meat 4–5 times per week

For some respondents regional and organic food from supermarkets lacks authenticity. This is an example of how the meanings of food, a specific supply system, and a particular place are intertwined.

Our interviews also demonstrated how widely used terms such as ‘regional’, ‘organic’, and ‘seasonal’ food are variously interpreted. For instance, the respondents defined seasonal food in two related, but nevertheless strikingly different, ways. According to the first definition, seasonal food was intuitively thought to comprise those ‘products which currently grow in the garden’ (Claudia, 39, Austrian). The second definition is similar in so far as it focuses on the time period when a certain product is available. However, what is implicitly referred to is not the time period when a fruit or vegetable grows, but when it is actually made available in the supermarket. This latter interpretation of seasonal food may be indicative of the increasing distance between consumers and producers and the resulting loss of knowledge about the production process that occurs under these circumstances. Further, interpreting all fruits and vegetables that are available in the supermarket during a certain time period to be in-season dismisses the link between seasonality and regionality that several interviewees emphasized. Claudia, a person who greatly values locally produced food, elaborated that seasonal products from elsewhere are not actually seasonal. The crucial criterion for her is ‘regionally seasonal’ with the local region stretching across a few hundred kilometers in Austria and Germany. Despite this strong linkage between regionality and seasonality, the practices of purchasing regional or seasonal produce involve different ‘sayings’ and ‘meanings’. While seasonality was frequently associated with freshness and fluctuating availability and prices, regionality was more often related to support for local farmers and the local economy, health (pesticides are more commonly used in Spain), or environmental issues

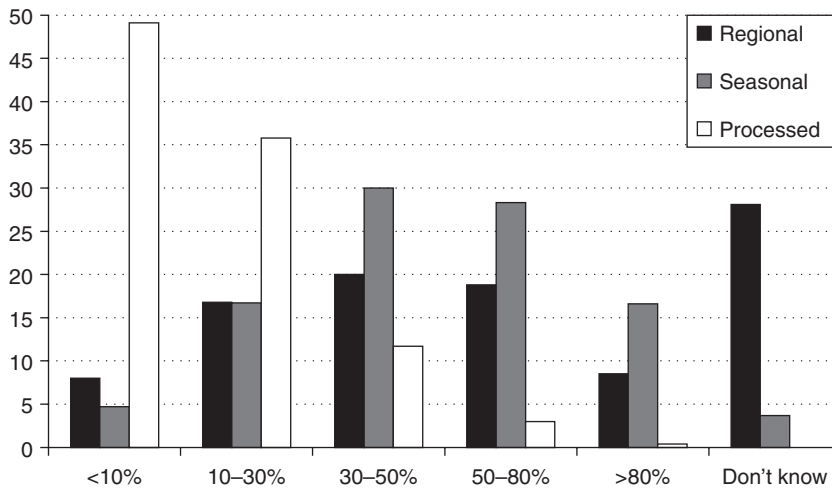


Figure 6.2 *Reported frequency of the amount of regional, seasonal, and processed food bought across Austria, Hungary, and the Netherlands (in percentages; n = 1217)*

(related to transportation distance). Further, our interviewees' definitions of 'regional' varied greatly from just a few kilometers away to the whole of Europe.

Based on our survey results, the quantitative pattern of food-purchasing practices displays a high consumption of regional, and even greater purchases of seasonal, produce (see Figure 6.2). While regionality was strictly defined in the survey, seasonality remained unexplained. Divergent understandings of seasonal products have certainly confounded the responses in untraceable ways. In contrast to the survey findings, our interviewees recognized little seasonal variation in their diets and explained that, since we live in times of abundance, seasonality is of little concern.

Being a competent carrier of a practice requires practical and general understanding. This can turn out to be problematic in the case of sustainable food purchasing. In general, people use a limited number of information sources to evaluate products. When pressed to explain how they knew whether food is regional or seasonal, for instance, respondents mentioned sign-posting, labeling, or market aisles designating regionality or the appearance of seasonal products for cheaper prices at a certain time of the year. The survey revealed high uncertainty around regional food, with nearly 30 percent of respondents stating they do not know how much of

their food is regionally produced, while less than 5 and 0 percent claim the same for seasonal and processed food, respectively.

The most important finding is that while those interviewees who do not select food on the basis of strict criteria could not name a single difficulty with food purchasing, the more selective respondents shared several experiences when they felt they lack competence. People who prefer sustainable food alternatives report problems when either a lack or surfeit of eco-labels is provided. As an additional difficulty, not every sustainable food product is available in all supermarkets so people need to acquire detailed knowledge about where to find specific products. If they regard being informed about regionality, seasonality, or other food characteristics as important, our respondents indicated that they work to close knowledge gaps. This is exemplified by Annik and Jan (54 and 60, Dutch) who learned a lot about food in the aftermath of illness to navigate the complex terrain of product ingredients. Over time, this newly acquired knowledge became second nature to them and integral to their practices. According to prominent practice theorists, learning is as much a cognitive and bodily process (Polanyi [1958] 1998) as a social one involving belonging, engaging, and developing identities (Lave and Wenger 1991). The next subsection discusses personal factors in more detail.

Practice-carriers: Capabilities, Careers, and Projects, Values and Expectations

Elements that relate to practice-carriers and that shape and are shaped by practices include capabilities, careers and projects, and values and expectations. The analysis of socio-demographic factors (see Tables 6.2 and 6.3) is used to construct profiles of common or archetypical carriers of (sustainable) food-purchasing practices and reflects their capabilities. Most socio-demographic factors can be interpreted as proxies for the practices an individual has carried in the past and the ways someone is expected to behave. Educational background, for instance, roughly reflects the years a person spent at school and how much cultural capital was accumulated through this practice. This, in turn, may decrease or increase the capabilities of a person to carry a practice. Age, gender, and income level can be interpreted in a similar way. Age and gender also provide some insight into physical abilities.

Overall, the regression output reveals only a few significant factors for each sustainable food-purchasing practice, though some are very strong predictors. Age differences are particularly striking: older respondents are more likely to buy a greater number of regional and seasonal items but less processed food. Similarly, respondents with a high educational background

(university degree or higher) are more prone to buy processed food, but consume less meat or fish than their counterparts who only completed secondary school. These findings are consistent with results reported in other studies (Diamantopoulos et al. 2003; Zepeda and Li 2006).

Further, interviewees explained how life circumstances like their family situation and time pressure play a role in the consumption of processed food. Different practices, such as the consumption of fresh vs. processed products, compete for performance. Candel (2001), Ragaert et al. (2004), and Jabs and Devine (2006) suggest that convenience is an important driver for consuming processed food. Accordingly, perceived time pressure, often caused by long working hours, makes people buy processed food and ready-made meals instead of spending the time to prepare a meal from fresh ingredients. One respondent Peter (41, Austrian) elaborated how his dietary habits tend to fluctuate. After periods of eating a lot of junk food and skipping breakfast there are times in which he is reportedly more reflective and switches to a 'holistic' diet. He attributes these changes to his self-employed working circumstances and ever-fluctuating working hours. Thus additional leisure time may, for some people, provide opportunity for critical reflection on and changes in their dietary habits. However, our regression results show that differences in the total number of hours people work per week cannot explain variations in the purchase of regionally seasonal or processed food.⁵ Our respondents also suggested that time constraints are relevant for the purchase of regional produce and meat, though for different reasons. One interviewee considered meat as a rather simple and timesaving option or, in other words, a convenience good.

How might we explain these contradictory findings? Warde et al. (1998) reasoned that it is not working time that leads to increased consumption of processed food. In fact, working hours per person have remained constant or even declined in most European countries in recent decades. Yet, according to the authors, working hours are becoming increasingly scattered, which makes it difficult to synchronize time-space paths in everyday life. Convenience goods, including ready-made meals, help people to free up time for social activities. This may explain the insignificance of working time in the regression, while at the same time acknowledging the importance of time that we could trace in the interviews.⁶

The above compellingly shows that practice-carriers need to acquire competences to become carriers but practices also need to adapt to the life situation of their carriers. Changes in life circumstances thus provide fertile ground for practices to recruit new carriers and for new practices to emerge (Schäfer et al. 2012; Shove et al. 2012). If people face altered conditions, they are often forced to abandon certain habits and re-organize their

life. Situations that typically lead (at least periodically) to persistent life-style changes, including with respect to food-consumption practices, are moving out of one's parental home (András, 30, Hungarian) or enrolling children in school (Annik, 53, Dutch).

However, whether changing conditions actually lead to the adoption of new food-buying practices also depends on values and expectations. Maria (74, Austrian), for example, almost exclusively buys seasonal and organic food from the region and has not changed her diet over the years, despite financially difficult periods. Her strong commitment to environmental conservation made her stick to her sustainable diet. Survey results also suggest that sustainable food-purchasing practices are more common among people who agree with statements such as 'I like spending time in nature' and 'I feel a (spiritual) connection with nature.'

In addition to values, the expectations of how a practice is to be performed also form an essential element in our proposed framework. Expectations depend as much on individual needs as on perception of how a practice is 'normally' performed. Further, products do shape the owner's expectations and may render the user incompetent if she is unable to live up to them (Shove et al. 2007). For example, shared expectations of food purchasing may explain the observed differences across age groups. Our older respondents often described food purchasing as a social activity and sought the contact with farmers while our younger interviewees highlighted the possibility to discover new products when shopping for food and the satisfaction of finding items that they like. Clearly, performances of the same practice vary congruently with elements related to individual carriers but are similar for cohorts comparable in terms of socio-demographics, values, or projects (life circumstances).

Production–Consumption Systems: Infrastructure, Culture, Products

Some of the factors that influence food-purchasing practices are located outside the sphere of individual consumers and we can consider them to be elements of the production–consumption system. As outlined above, these factors are not external to practices, but may be more appropriately conceptualized as forming part of other practices, such as policy making. For individual carriers and the practices in which they engage, these factors appear highly persistent and immutable.

Nearly all of our respondents questioned the reliability of information disclosed on product packaging about country or region of origin, production method, or ingredients contained. This uncertainty can contribute to a certain sense of powerlessness:

When I buy some cold cuts or ham, for instance, it is very difficult at Billa [Austrian retail chain] to find out where the products are really coming from. In Austria, it is enough that the packaging is done in Austria to label it with an 'A'. Sometimes, a feeling of powerlessness comes up in such situations because one is actually unable to see the origin of the ham I buy. (Claudia, 39, Austrian)

Some respondents suspect capitalist motives to be the key factor determining the strategies of producers and retailers. The purchase of regional, seasonal, and organic products and the boycott of processed food are sometimes framed as a criticism of the prevailing food-provisioning system. At the same time, the purchase of such products may be interpreted as a reaction on the part of consumers to rebuild trust with producers (Sassatelli and Scott 2001).

The production–consumption systems differ, in the first place, with respect to infrastructures and availability of products. Austrian and Dutch consumers experienced the proliferation of modern supermarkets much earlier than their Hungarian counterparts. In 1993, the Hungarian food-distribution system was estimated to be 25 years behind the West (Mueller et al. 1993). Even though Hungarian food-provisioning processes have experienced rapid convergence toward western European standards, domestic demand for organic food remains negligible (see Table 6.3) and domestically produced organic produce is largely grown for export (Kjærnes and Torjusen 2012).

The strong cross-national variations evident in our survey, for example the substantially lower likelihood of Dutch respondents to buy regional food, may be due to the fact that this practice faces an unfavorable environment in the Netherlands. While only 47 percent of the population considers the geographical origin of food to be important – the lowest share among the EU-27 countries, the provenance of food is important to 78 percent of Austrians and 81 percent of Hungarians (Eurobarometer 2012).

Cross-national differences prevail in all of the aspects related to sustainable consumption addressed in our survey with the exception of the purchasing of seasonal food. These differences relate to cultural diversity as well as to varying provisioning systems which are, of course, intricately intertwined. Our survey indicates how individual practices vary but that observable patterns prevail. For example, Dutch food culture is usually associated with a practical attitude to food, where it is mainly valued for its functions like nutrition and health, rather than the pleasure of eating (de Borja et al. 2010). Further, consumption of simple snacks throughout the day and a cooked meal for dinner is typical in the Netherlands. In Austria and Hungary, lunch plays a more prominent role in everyday life. Such dominant food patterns

are deeply rooted in society, passed on from one generation of carriers to the next, and typically remain relatively stable over time.

CONCLUSION

This chapter is part of an emerging literature on social practices which attends to entangled elements. Our research stands out by investigating the carriers of practices and the multitude of shaping factors in considerable detail with the help of in-depth interviews and the use of survey analysis. Our motivation to conduct a multi-method analysis of food-purchasing practices has been twofold. On the one hand, our study is driven by questions concerning which factors influence (more sustainable) practice performances and, on the other hand, by a desire to capture the diversity in these practice performances, both conceptually and analytically. The conceptual framework of a web of entangled elements that we developed for this purpose stretched beyond elements that form part of a single practice and included others related to practice-carriers and production–consumption systems.

It became apparent how some elements of food purchasing intersect with other practices and most notably with participation in the labor force. Further, we showed that broadening the analysis of relevant elements related to practice-carriers, as well as to systemic factors, highlights and systematizes the various reasons for practice variability. The main sources for innovation in practices are thus the confrontation of practices with new or changed carriers and production–consumption systems. Consequently, studying change or innovation requires the investigation of the factors we attribute to the production–consumption system (culture, products, infrastructure) and an understanding how practices are interrelated, including the past and present practices of individuals. By drawing attention to the influential factors that are usefully conceptualised outside of the focal practice(s) under scrutiny, our framework makes many sources for change visible that are not discussed in the literature on social practices (see Gram-Hanssen 2011).

Our discussion shows how looking at different elements from a practice, an individual or a systemic perspective offers new insights into how elements tie bundles of practices together. Material elements, for example, can be understood as a static backdrop (from a practice perspective), as a range of possibilities (from a carrier's perspective), or as a historically and culturally varying setting for activities (from a production–consumption system perspective). These findings open up practice research to more quantitative approaches for the analysis of how practices are inter-related, across space, time and individuals. The chapter also builds a bridge

between practice and transition research by giving attention to ‘landscape’ factors (values, beliefs, and socio-demography) and regimes of practices (Hargreaves et al. 2013; McMeekin and Southerton 2012). We therefore experienced our focus on a set of (related) practices as empirically interesting and conceptually innovative (see also Bellotti and Mora 2014; Pullinger et al. 2013; Wieser et al. 2014).

Our survey findings offer insights into how various factors related to country-specific differences in production–consumption systems influence food-purchasing practices. As mentioned at the outset, we acknowledge that production–consumption systems can be conceptualized as a set of practices corroborated in customs and traditions, shared norms and values, legislation, or infrastructures. Our analysis of a particular set of practices related to food consumption has, however, proven to be more revealing by considering production–consumption systems as the rather static, yet diverse, settings with which practitioners engage in everyday life. Based on our interviews, this conceptualization allowed us to trace the material aspects to which people pay particular attention and the meanings they attach to places, products or practices that they consider to be important in navigating material and cultural systems.

In addition to delivering interesting insights into the geographical scope of particular practice performances, our survey also proved to be an appropriate method of choice for elaborating their socio-demographic scope. Supplemented by our interview findings, it became apparent how practice performances shift with changing life circumstances and time constraints, after a significant experience or simply due to information gleaned through the media. These shifts in performances, which otherwise are rather stable for longer periods of time, can be viewed as punctuated equilibria, with one and the same person being able to perform several equilibria, depending on which set of materials, meanings, and competences she is drawing. In addition, some aspects of practice performances, for example the personal commitment and dedication to eat regional food as much as possible, can remain stable over an entire lifetime despite changing circumstances.

With respect to shedding light on the practice of sustainable food purchasing itself, our survey and interview findings help to demonstrate how the materials, meanings, and competences tied to particular forms of this practice – buying regional, seasonal, or organic produce, or purchasing meat – interrelate. Further entanglements were found with other practices such as working or cooking. The practice we studied proved to be remarkably diverse, yet patterned similarities emerged.

Overall, our framework is conducive to identifying elements that can be attributed conceptually to production–consumption systems

(infrastructure, culture, products, and services), to the individual practice-carrier (capabilities, career and projects, values and expectations) or to the particular practice under study (materials, meanings, competences). Not least due to their entanglement, the analytical attribution of certain elements to the practice under study, its carriers, or the production–consumption system is not always straightforward. Overall, our findings reinforce the value of a social practice perspective: socio-cultural and material contexts are deeply embedded in carriers of practice and recursively reproduced through the actions of everyday life. We found patterns of practices to be relatively stable at different levels of aggregation, across socioeconomic groups, and in various material settings. Shifts toward sustainable practices require engaging the web of entangled elements across (competing) practices, their carriers, and production–consumption systems.

NOTES

1. The survey was conducted in the context of the POLFREE project, funded as part of the European Union's Seventh Framework Programme (FP7/2007–2013) under grant agreement No. 308371. For a complete list of all questions and a report on all consumption domains addressed (food, housing, and mobility) refer to the POLFREE Report 1.6 available at <http://www.polfree.eu/publications/publications-2014/individual-behavioural-barriers-to-resource-efficiency>. The survey response rates for each country were: Austria 21.6 percent, Hungary 25.0 percent, and the Netherlands 61.0 percent. We devote attention to three countries because the associated project that gave rise to this work required a focus on several European countries. Selection of these three nations enabled the research team to economize on translation costs and facilitated cooperation with the project partners. In our view, the comparison of any three countries can be expected to bear interesting insights.
2. In our research, attitudes and values relate to cultural contexts and dominant socio-cultural meanings.
3. Detailed information on the sample can be found in Wieser (2014).
4. Furthermore, different people experience material elements differently and this invites an analysis of how the same product or place is variously viewed. For example, while some respondents consider food purchasing a necessary duty and avoid it as much as possible (András, 30, Hungarian), others feel a sense of achievement when making 'good choices' (Jan, 60, Dutch), and, yet again, others thoroughly enjoy it when visiting a farmers' market (Zsófia, 65, Hungarian).
5. Working hours per week was initially included in the regression analyses but found to be insignificant. Since the question on working hours only applied to employed people, the variable was dropped to better account for the differences among other occupational groups.
6. Another possible explanation is that food-related chores are shared among our respondents' household members in such a way that the effect of work time on food consumption is dampened.

REFERENCES

- Atkinson, Paul and Amanda Coffey (2003), 'Revisiting the relationship between participant observation and interviewing', in J.F. Gubrium and J.A. Holstein (eds), *Postmodern Interviewing*, Thousand Oaks, CA: Sage, pp. 109–122.
- Bellotti, Elisa and Emanuela Mora (2014), 'Networks of practices in critical consumption', *Journal of Consumer Culture*, published online before print, 26 May 2014. doi: 10.1177/1469540514536191.
- Bourdieu, Pierre (1986), 'The forms of capital', in J. Richardson (ed.), *Handbook of Theory and Research for the Sociology of Education*, New York: Greenwood, pp. 241–258.
- Bourdieu, Pierre (1990), *The Logic of Practice*, Malden, MA: Polity Press.
- Candel, Math (2001), 'Consumers' convenience orientation towards meal preparation: conceptualization and measurement', *Appetite*, **36** (1), 15–28.
- Diamantopoulos, Adamantios, Bodo Schlegelmilch, Rudolf Sinkovics, and Greg Bohlen (2003), 'Can socio-demographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation', *Journal of Business Research*, **56** (6), 465–480.
- de Borja, Juan, Lenneke Kuijer, and Walter A. Aprile (2010), 'Designing for sustainable food practices in the home,' paper presented at the ERSCP-EMSU Conference, Delft, The Netherlands, 25–29 October 2010.
- Douglas, Mary (1982), *In the Active Voice*, New York: Routledge and Kegan Paul.
- Douglas, Mary (1984), 'Standard social uses of food: introduction', in Mary Douglas (ed.), *Food in the Social Order: Studies of Food and Festivities in Three American Communities*, New York: Russell Sage Foundation, pp. 1–39.
- Eurobarometer (2012), *Europeans' Attitudes Towards Food Security, Food Quality and the Countryside: Report*, Special Eurobarometer 389, Brussels: European Commission.
- Geertz, Clifford ([1973] 2003), 'Thick description: toward an interpretive theory of culture', in Y. Lincoln and N. Denzin (eds), *Turning Points in Qualitative Research: Tying Knots in a Handkerchief*, Walnut Creek, CA: AltaMira Press, pp. 236–247.
- Gherardi, Silvia and Davide Nicolini (2002), 'Learning the trade: a culture of safety in practice', *Organization*, **9** (2), 191–223.
- Giddens, Anthony (1979), *Central Problems in Social Theory: Action, Structure and Contradiction in Social Analysis*, Berkeley, CA: University of California Press.
- Giddens, Anthony (1984), *The Constitution of Society: Outline of the Theory of Structuration*, Berkeley, CA: University of California Press.
- Gram-Hanssen, Kirsten (2011), 'Understanding change and continuity in residential energy consumption', *Journal of Consumer Culture*, **11** (1), 61–78.
- Halkier, Bente and Iben Jensen (2011), 'Methodological challenges in using practice theory in consumption research. Examples from a study on handling nutritional contestations of food consumption', *Journal of Consumer Culture*, **11** (1), 101–123.
- Hargreaves, Tom, Noel Longhurst, and Gill Seyfang (2013), 'Up, down, round and round: connecting regimes and practices in innovation for sustainability', *Environment and Planning A*, **45** (2), 402–420.
- Hitchings, Russell (2012), 'People can talk about their practices', *Area*, **44** (1), 61–67.

- Jabs, Jennifer and Carole Devine (2006), 'Time scarcity and food choices: an overview', *Appetite*, **47** (2), 196–204.
- Kennedy, Emily, Harvey Krahn, and Naomi T. Krogman (2013), 'Taking social practice theories on the road: a mixed-methods case study of sustainable transportation', in M.J. Cohen, H.S. Brown, and P.J. Vergragt (eds), *Innovations in Sustainable Consumption: New Economics, Socio-technical Transitions and Social Practices*, Cheltenham and Northampton, MA: Edward Elgar Publishing, pp.252–276.
- Kjærnes, Unni and Hanne Torjusen (2012), 'Beyond the industrial paradigm? Consumers and trust in food', in G. Spaargaren, P. Oosterveer and A. Loeber (eds), *Food Practices in Transition: Changing Food Consumption, Retail and Production in the Age of Reflexive Modernity*, New York: Routledge, pp.86–106.
- Lave, Jean and Etienne Wenger (1991), *Situated Learning: Legitimate Peripheral Participation*, New York: Cambridge University Press.
- McMeekin, Andrew and Dale Southerton (2012), 'Sustainability transitions and final consumption: practices and sociotechnical systems', *Technology Analysis and Strategic Management*, **24** (4), 345–361.
- Miroso, Miranda, Daniel Gnoth, Rob Lawson and Janet Stephenson (2011), 'Rationalising energy-related behaviour in the home: insights from a value-laddering approach', *European Council for an Energy Efficient Economy Summer Study Proceedings*, pp.2109–2119, available at: <http://proceedings.eceee.org/vis-abstrakt.php?event=1&doc=8-561-11> (accessed 11 February 2014).
- Mueller, Rene Dentiste, James Wenthe, and Peter Baron (1993), 'Case note: the evolution of distribution systems: a framework for analysing market changes in Eastern Europe: the case of Hungary', *International Marketing Review*, **10** (4), 36–52.
- Nicolini, Davide (2013), *Practice Theory, Work, and Organization: An Introduction*, New York: Oxford University Press.
- Polanyi, Michael ([1958] 1998), *Personal Knowledge: Towards a Post-Critical Philosophy*, New York: Routledge.
- Pullinger, Martin, Alison Browne, Ben Anderson, and Will Medd (2013), *Patterns of Water: The Water Related Practices of Households in Southern England, and Their Influence on Water Consumption and Demand Management*, Lancaster, UK: Lancaster University.
- Ragaert, Peter, Wim Verbeke, Frank Devlieghere, and Johan Debevere (2004), 'Consumer perception and choice of minimally processed vegetables and packaged fruits', *Food Quality and Preference*, **15** (3), 259–270.
- Reckwitz, Andreas (2002), 'Toward a theory of social practices: a development in culturalist theorizing', *European Journal of Social Theory*, **5** (2), 243–263.
- Royal Commission on Environmental Pollution (2006), *26th Report: The Urban Environment*, available at: <http://webarchive.nationalarchives.gov.uk/20060716005107/http://www.rcep.org.uk/urbanenvironment.htm> (accessed 11 February 2014).
- Sassatelli, Roberta and Alan Scott (2001), 'Novel food, new markets and trust regimes: responses to the erosion of consumers' confidence in Austria, Italy and the UK', *European Societies*, **3** (2), 213–244.
- Schäfer, Martina, Melanie Jaeger-Erben, and Sebastian Bamberg (2012), 'Life events as windows of opportunity for changing towards sustainable consumption

- patterns? Results from an intervention study', *Journal of Consumer Policy*, **35** (1), 65–84.
- Schatzki, Theodore (1996), *Social Practices: A Wittgensteinian Approach to Human Activity and the Social*, New York: Cambridge University Press.
- Shove, Elizabeth (2010), 'Beyond the ABC: climate change policy and theories of social change', *Environment and Planning A*, **42** (6), 1273–1285.
- Shove, Elizabeth and Mika Pantzar (2005), 'Consumers, producers and practices: understanding the invention and reinvention of Nordic walking', *Journal of Consumer Culture*, **5** (1), 43–64.
- Shove, Elizabeth, Mika Pantzar, and Matt Watson (2012), *The Dynamics of Social Practice: Everyday Life and How it Changes*, Thousand Oaks, CA: Sage.
- Shove, Elizabeth, Matt Watson, Martin Hand, and Jack Ingram (2007), *The Design of Everyday Life*, New York: Berg.
- Spaargaren, Gert (2003), 'Sustainable consumption: a theoretical and environmental policy perspective', *Society and Natural Resources*, **16** (8), 687–701.
- Warde, Alan (2005), 'Consumption and theories of practice', *Journal of Consumer Culture*, **5** (2), 131–153.
- Warde, Alan, Elizabeth Shove, and Dale Southerton (1998), 'Convenience, schedules and sustainability', paper presented at the European Science Foundation Workshop on Consumption, Everyday Life and Sustainability, Lancaster University, Lancaster, UK, 27–29 March.
- Wieser, Harald (2014), *Zooming In and Zooming Out on the Practice of Sustainable Food Shopping: Evidence from Austria, Hungary and The Netherlands*, Master's thesis, Vienna University of Economics and Business.
- Wieser, Harald, Julia Backhaus, and René Kemp (2014), 'Exploring (in)consistencies and spillovers across sustainable food shopping practices', paper presented at the 5th International Conference on Sustainability Transitions, 27–29 August, Utrecht University, Utrecht.
- Zepeda, Lydia and Jinghan Li (2006), 'Who buys local food?', *Journal of Food Distribution Research*, **37** (3), 1–11.